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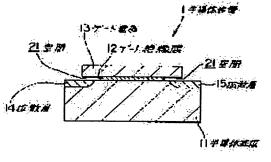
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## (54) SEMICONDUCTOR DEVICE AND ITS MANUFACTURE

(57)Abstract:

PROBLEM TO BE SOLVED: To prevent current leakages from increasing and an element characteristic from deteriorating due to the increase in gate electric field with thinning of a gate insulating film, and also when a high dielectric constant material is used for a gate insulating film.

SOLUTION: In the semiconductor device 1, a gate electrode 13 is formed on a semiconductor substrate 11 via the gate insulating film 12, and diffused layers 14 and 15 are formed on the semiconductor substrate 11 on both sides of the gate electrode 13. In such a case, the gate insulating film 12 is formed shorter in a gate length direction as compared to that in the gate electrode 13, and a space 21 is formed on the side of the gate insulating film 12 in the gate length direction and in a region which is sandwiched by the gate electrode 13 and the semiconductor substrate 11 and in which the diffused layers 14 and 15 are overlapped in terms of a planar view. A dielectric is embedded in the space 21.



## **LEGAL STATUS**

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